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October 7, 2011

TRC Solutions Project No. 182978

Mr. Gary Moore  
U.S. EPA Region 6  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733

**Re: Weekly Progress Report  
Falcon Refinery Superfund Site  
Ingleside, San Patricio County, Texas  
TXD 086 278 058**

Dear Mr. Moore:

On behalf of the National Oil Recovery Corporation (NORCO), TRC Solutions (TRC) submits this Weekly Progress Report on the Removal Action Activities at the Falcon Refinery Federal Superfund Site to the United States Environmental Protection Agency for your review.

If you have any questions, comments, or concerns, please do not hesitate to contact me at (512) 699-9931.

Sincerely,  
TRC

Alonzo G. Arredondo  
Senior Geologist

Attachment: Weekly Progress Report  
cc: National Oil Recovery Corporation

## **WEEKLY PROGRESS REPORT (October 3-7, 2011) - Falcon Refinery Superfund Site, Ingleside, TX;**

### **1. COMPLETED PROJECT ACTIVITIES TO DATE**

The project activities completed to date are listed below.

#### **A. Removal of Sludge and Demolition of Tanks**

Tanks completed to date are located in Area of Concern 1N (AOC 1N) and the main portion of the Falcon Refinery. AOC 1N is located on the property which lies north-west of the intersection of FM 2725 and Bishop Road in Ingleside, TX.

The activities completed for the tanks listed below include removal and transfer of tank bottoms into Tank 26, decontamination, demolition and/or the removal/transportation of the tanks from the Falcon Refinery to Commercial Metals (CMC recycling) in Corpus Christi, TX:

- Tank 2 - The tank was removed from the property and recycled.
- Tank X1 - The tank was removed from the property and recycled.
- Tank X2 - The tank was removed from the property and recycled.
- Tank X3 - The tank was removed from the property and recycled.
- Tank 18 - The tank was removed from the property and recycled.
- Tank 17 - The tank was removed from the property and recycled.
- Tank 21 - The tank top was removed and waste is being managed on site.
- Tank 22 - The tank top was removed and waste is being managed on site.
- Tank 23 - The tank top was removed and waste is being managed on site.
- Tank 27 – The contents and the sludge in this tank has been removed. The floor and lower side walls have been cleaned to facilitate inspection.

#### **B. Sampling and Waste Characterization**

Water samples were collected on May 10, 2011 from Tanks 20, 2 and 27 and submitted for chemical analysis.

Water samples were collected from Tanks 26, 10, 30 & 7 and submitted for chemical analysis on May 20, 2011.

A water sample was collected from Tank 26 for the purpose of characterizing the water for waste water treatment on July 26, 2011.

Preliminary sampling of Tanks 17, 18, 19, 20, 21, 22, 23, & 24 was conducted to characterize waste on September 9, 2011. Additional sampling for characterizing waste

was conducted on September 22, 2011. Sample results were received on September 29, 2011.

A one-time shipment number for the transportation and disposal of the caustic material in Tank 20 has been received from the TCEQ.

A composite sample comprised of tank bottom sludge was collected from the north and south manways of Tank 30 on October 5, 2011 for the purpose of characterizing the waste in that tank.

### **C. Demolition / Relocation of Structures**

A small building was moved to facilitate access to Tanks 17 - 24 by the shear and an 18-wheeler that is used to haul the metal.

## **2. PROJECT ACTIVITIES TO BE COMPLETED - (*Projected Schedule/ Established Deadlines to be developed*)**

### **A. Demolition / Relocation of Structures**

We are evaluating whether a small tank in the refinery should be removed to facilitate access and parking for the two shears and 18-wheelers.

### **B. Removal of Tank Tops**

The following tanks are scheduled for the partial removal of the tank tops. The removal will enable work to proceed within each tank with approximately 3 to 4 feet of sidewall and floor intact. Removal of will continue next week for the tanks listed below:

- Tank 17 - This tank has been topped, removed and recycled.
- Tank 18 - This tank has been topped, removed and recycled.
- Tank 19 - This tank will be topped, removed and recycled on October 10-15, 2011.
- Tank 20 - This tank will be topped, removed and recycled on October 10-15, 2011.
- Tank 21 - This tank has been topped.
- Tank 22 - This tank has been topped.
- Tank 23 - This tank has been topped.
- Tank 24 - This tank will be topped, removed and recycled on October 10-15, 2011.

### **C. Removal and Transfer of sludge to Tank 26 or Offsite Disposal Facility**

- Tank 27 sludge removal: The tank floor and lower walls have been cleaned.
- Tank 10 sludge removal: Activities continue to remove sludge from this tank with the use of two vacuum trucks.

- Tank 21, Tank 22 & Tank 23 sludge removal / demolition: Activities continue to manage the waste onsite before transporting the waste for disposal at an offsite facility;
- Tank 30 sludge removal: A cost proposal to complete the removal of sludge from this tank has been requested from the contractor. We anticipate receiving a proposal by October 10-15, 2011. Cleanout of this tank is complicated by the collapsed floating roof.
- Tank 7 sludge removal: A cost proposal to complete the removal of water and sludge from this tank has been requested from Gainco. We anticipate receiving a proposal by October 10-15, 2011.
- Tank 19 – This tank is scheduled for the removal of the top on October 10-15, 2011.
- Tank 20 – This tank is scheduled for the removal of the top on October 10-15, 2011.
- Tank 21 – This tank is scheduled for the removal of the top on October 10-15, 2011.
- Tank N1 sludge removal / demolition: Currently under evaluation;
- Tank N2 sludge removal / demolition: Currently under evaluation;
- Tank Y1 sludge removal / demolition: Currently under evaluation;

#### **D. Treatment of Water in Tank 26**

A permit to discharge the rainwater via irrigation from Tank 26 to the vacant field on the southwestern portion of the refinery property was submitted to the TCEQ during August 2011. The TCEQ requested additional information and disagreed with the provide characterization of the depth to groundwater. Despite the use of actual depth to groundwater data, obtained during Phase I of the RI/FS Field Sampling Plan, the TCEQ chose to rely upon generalized depth to groundwater data from Soil Conservation maps. To further prove the depth to groundwater five borings were drilled and similar to the data provided in the Land Discharge Application the depth to groundwater ranged from 7.2 feet to 11.1 feet below ground surface (Figure 2). Using old maps the TCEQ had concluded that groundwater was from 0.0 to 0.5 feet.

Results of the additional sampling will be provided to the TCEQ during the first week of October. Prior to any discharge of rainwater the water will be passed through activated carbon, placed into a tank and sampled to ensure that no contaminants are discharged.

### **3. COMPLETED PROJECT ACTIVITIES FOR WEEK OF OCTOBER 3-7, 2011**

#### **A. Removal of Tank Bottoms**

The removal of sludge from the refinery tanks was completed this week for the tank that is listed below:

Tank 27 – The contents of the tank has been removed and transferred to Tank 26.

#### **B. Demolition and Recycling**

The demolition and recycling of the tanks listed below were completed this week. The tanks were sheared, loaded into an 18-wheeler at the Falcon Refinery and transported to a recycling facility on Agnes Street in Corpus Christi, TX (Commercial Metals - CMC recycling).

- Tank 17
- Tank 18
- Tank 21 - This tank top was recycled.
- Tank 22 – This tank top was recycled.
- Tank 23 - This tank top was recycled.

#### **C. Removal and Transfer of sludge to Tank 26**

- Tank 27- 1.5 loads (105 bbls) of wash water were transferred to Tank 26;
- Tank 10 – 9 loads (630 bbls) of tank bottom sludge were transferred to Tank 26;
- Tank 17 – 3 loads (210 bbls) of tank bottom sludge/wash water were transferred to Tank 26;

#### **D. Sampling and Waste Characterization**

Tank 30 - A composite sample comprised of tank bottom sludge from Tank 30 was collected on October 5, 2011 for the purpose of characterizing the waste in the tank. The sample was collected from the north and south man ways of the tank and submitted for chemical analysis.

### **4. ACTIVITIES PLANNED FOR NEXT WEEK – OCTOBER 10-15, 2011**

#### **A. Tank Bottom Sludge Removal**

- Tank 10 – We plan to continue with the removal of tank bottom sludge and transfer the material into Tank 26;

- Tank 19 – We plan to manage the waste onsite in a box until we transport and dispose of it at an offsite facility;
- Tank 20 – We plan to remove the caustic sludge and transport the material to an offsite facility for treatment and disposal;
- Tank 21 - We plan to manage the waste onsite in a box until we transport and dispose of it at an offsite facility;
- Tank 22 - We plan to manage the waste onsite in a box until we transport and dispose of it at an offsite facility;
- Tank 23 - We plan to manage the waste onsite in a box until we transport and dispose of it at an offsite facility;
- Tank 24 – We plan to remove and transfer the pumpable liquids into Tank 26, and manage the remaining waste onsite until we transport and dispose of it at an offsite facility.

#### **B. Removal of Tank Tops & Sludge Removal**

- We plan to begin removal of liquids from Tanks 19, 20 and 24 next week;
- We plan to remove and dispose of tank metal/solids from Tanks 19, 20, 21, 22, 23, and 24 next week.

#### **C. Disposal of Sludge, Metal and Sediment**

Material including metal, dry sediment and K169 listed waste, which is above the universal treatment standards, will be transported and disposed of at U.S. Ecology. This material includes metal from the roofs of the tanks that fell into Tanks 19, 20, 21, 22, 23 and 24.

The tank liquids that exceed the treatment standards will be transferred into Tank 26.

The waste solids and caustic material in Tank 20 will be sent to U.S. Ecology for treatment and thermal desorption.

#### **D. Demolition / Relocation of Structures**

### **5. ISSUES ENCOUNTERED**

- Tank 27 - Residual sludge was more difficult to remove and required more time to transfer due to the significant amounts of rust and debris in the material; since a higher

viscosity material was encountered, the rate of sludge that was removed and transferred into Tank 26 became less than optimal (3 loads removed and transferred per day).

- Treatment of Water - We have evaluated the groundwater conditions at the site and plan to demonstrate that groundwater is deeper than the depth at which the TCEQ has opined. This effort will support granting an approval of the waste water permit for the treatment and discharge of water in Tank 26.
- Removal of the small Tanks N1, N2 & Y1 will be evaluated;